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EXAMINER

HOSSAIN, TANIM M

ART UNIT	PAPER NUMBER
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2145

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/033,003

Applicant(s)

CAMBLE ET AL.

Examiner

Tanim Hossain

Art Unit

2145

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/13/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 8, 12, 13-15, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abboud (U.S. 6,636,958) in view of Schubert (U.S. 6,742,034).

As per claim 1, Abboud teaches a method for providing data storage capacity on demand comprising: partitioning at least a portion of a set of active data media storage slot elements and active data transfer elements of said data library, exclusive of disabled elements, into partitions for use by said end users; and redefining said sets in response to changes in storage capacity. rights of said end users (column 6, lines 37-44; column 9, lines 46-64). Abboud does not specifically teach the disabling of slot and data transfer elements, thus disallowing user access to these elements. Schubert teaches the disabling of these elements, which effectively disallows access to these elements (column 8, lines 1-15; column 4, lines 42-57). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the disabling of certain slot elements, which would in turn, disallow access to certain elements, as taught by Schubert in the system of Abboud. The motivation for doing so lies in the fact that if users need extra space, an efficient method to provision this would constitute the disabling of certain

resources, so that space is freed up for those users. Both inventions are from the same field of endeavor, namely the intelligent management of computer storage space.

As per claim 2, Abboud-Schubert teaches the method of claim 1, further comprising reserving at least a portion of said disabled set of data media storage slot elements and data transfer elements for present and future use by one of said end users (Abboud: 3; 1-14).

As per claim 3, Abboud-Schubert teaches the method of claim 1, wherein said redefining step further comprises moving at least one element of said second to said first set in response to an order from one of said end users for additional storage capacity (Abboud: 7; 21-36).

As per claim 4, Abboud-Schubert teaches the method of claim 3, but does not specifically teach charging the customer for additional storage capacity. Official notice is taken that the charging of customers for storage space is well known in the art. It would have been obvious to one of ordinary skill in the art to combine the well-known component of paid storage into the system of Abboud-Schubert, so this service would only be available to those users who really need it, adding to efficiency of the invention.

As per claim 5, Abboud-Schubert teaches the method of claim 1, wherein said data library is controlled by a storage service provider (Schubert: 1; 30-40).

As per claim 6, Abboud-Schubert teaches the method of claim 1, but does not specifically teach that the end users are customers of the storage service provider. It would have been obvious to one of ordinary skill in the art at the time of the invention to specifically include the limitation that the end users are customers of the storage service provider. For the storage provider to have utility, it must have customers, and having the end users of the system as the customers of the storage service provider would give the system utility.

As per claim 8, Abboud-Schubert teaches the method of claim 1, wherein said redefining step comprises: moving at least one element of said second set to said first set in response to an order from said one end user for additional storage capacity and availability of said elements (Abboud: 10; 1-35, 7; 21-36).

As per claim 12, Abboud-Schubert teaches the method of claim 1, but does not specifically teach that the library is located on the premises of the end users. It would have been obvious to one of ordinary skill in the art to include the existence of the data library on the premises of the users, as in a computer system, where the user is located at the client computer, and the data library is also located at the same computer. The motivation for doing so lies in the fact that most computers have data libraries, and having this system at the premises of the user would allow for greater functionality of that computer.

As per claim 13, Abboud-Schubert teaches a method for providing data storage capacity on demand comprising: reserving a set of data media storage slot elements and data transfer elements in a data library for present and future use by a customer (Abboud: 3; 1-14); disabling a subset of said set of slot elements and data transfer elements (Schubert 8; 1-15, 4; 42-57); partitioning said reserved set into a subset of said set of slot elements and data transfer elements activated as a partition secured for use by said customer, wherein said subsets are exclusive of one another (Abboud: 7; 21-36); and redefining said partition by moving at least one element between said subsets in response to changes in storage capacity needs of said customer (Abboud: 10; 1-35, 7; 21-36)

As per claim 14, Abboud-Schubert teaches the method of claim 13, but does not

specifically teach the adjusting of customer charges according to said redefining. Official notice is taken that the adjustment in a pay-per-use paradigm is well known in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to include this well-known component of usage based charging into the system of Abboud-Schubert, to allow appropriate charges to be levied against users, based on how much usage has taken place.

As per claim 15, Abboud-Schubert teaches the method of claim 13, wherein said library is controlled by a storage service provider (Schubert: 1; 30-40).

Claim 16 is rejected on the same basis as claim 6.

As per claim 18, Abboud-Schubert teaches the method of claim 14, further comprising redefining said partitioned set by moving at least one element between said sets in response to a change in storage capacity needs of said customer and availability of said elements (Abboud: 7; 21-36).

Claims rejected under 35 U.S.C. 103(a) as being unpatentable over Abboud-Schubert in view of Darago (U.S. 6,606,664).

As per claim 7, Abboud-Schubert teaches the method of claim 1, but does not specifically teach the keying of the first elements on a license purchased by one of said users. Darago teaches the licensing of certain groups of services (4; 15-25). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the ability to license a group of services, as taught by Darago in the system of Abboud-Schubert. The motivation for doing so lies in the fact that having a license to a specific service would allow protection of those services

to users who have paid for it, which thus ensures that only those users that are serious about these services can use them. All inventions are from the same field of endeavor, namely user-driven network provisioning.

As per claim 9, Abboud-Schubert-Darago teaches the method of claim 8, but does not specifically teach that the said availability is based in part on a license by one of said end users. It would have been obvious to one of ordinary skill in the art to include the distinction that availability is controlled by the licenses. It is an obvious component of licenses to make available a service to only those users with a license, and to make this service unavailable to those users who do not have a license.

As per claim 10, Abboud-Schubert-Darago teaches the method of claim 9, but does not specifically teach the blocking of a service in light of the user not having a license. It would have been obvious to one of ordinary skill in the art at the time of the invention to block users not having licenses. Licenses are purchased by the user, and only those users are allowed to access certain services. If a user did not purchase a server, he/she should not be allowed access to the system.

As per claim 11, Abboud-Schubert-Darago teaches the method of claim 9, further comprising the increasing of library capacity (Abboud: 1; 56-64). Abboud-Schubert-Darago does not specifically teach the increasing of the license for it. It would have been obvious to one of ordinary skill in the art at the time of the invention to include the ability to purchase further access rights. Most subscription services offer more services for an increased fee, which constitutes the extension of licensing capacity.

As per claim 11, Abboud-Schubert-Darago teaches the method of claim 9, further comprising extending licensed library capacity (Abboud: 1; 56-64).

As per claim 17, Abboud-Schubert-Darago teaches a method for limiting access to data storage capacity in a data library, said method comprising: disabling a set of slot elements and data transfer elements of said data library, disallowing access to said disabled set (Schubert: 8; 1-15, 4; 42-57); partitioning at least a portion of a set of active slot elements and active data transfer elements of said data library into partitions for use by one customer, wherein said sets are exclusive of one another (Abboud: 7; 21-36, 6; 37-44, 9; 46-64). Abboud-Schubert does not specifically teach the keying of numbers of the elements in the set on a license purchased by the user. Darago teaches the keying of the numbers of said elements in said partitioned set on a license purchased by said customer (Darago: 4; 15-25). It would have been obvious to one of ordinary skill in the art at the time of the invention to include a licensing method in the storage controller as taught by Darago in the system of Abboud-Schubert. The motivations to combine teachings are the same as the ones set forth in claim 7.

Claims 19, 20, and 21 are rejected on the same bases as claims 9, 10, and 11 respectively.

Claim 22 is rejected on the same basis as claim 12 along with claim 17.

As per claim 23, Abboud-Schubert-Darago teaches the method of claim 17, wherein said customer is a storage service provider (Schubert: 1; 30-40).

Response to Arguments

Applicant's arguments filed on May 3, 2005 have fully been considered but are not persuasive.

a. When reviewing a reference, the applicants should remember that not only the specific teachings of a reference, but also reasonable inferences which the artisan would have logically drawn therefrom may properly be evaluated in forming a rejection. In re Preda, 401 F. 2d 825, 159 USPQ 342 (CCPA 1968) and in re Shepard, 319 F. 2d 194, 138 USPQ 148 (CCPA 1963). Skill in the art is presumed. In re Sovish, 769 F. 2d 738, 226 USPQ 771 (Fed Cir. 1985). Furthermore, artisans must be presumed to know something about the art apart from what the references disclose. In re Jacoby, 309 F. 2d 513, 135 USPQ 317 (CCPA 1962). The conclusion of obviousness may be made from common knowledge and common sense of a person of ordinary skill in the art without any specific hint or suggestion in a particular reference. In re Bozek, 416 F. 2d 1385, 163 USPQ 545 (CCPA 1969). Every reference relies to some extent on knowledge of persons skilled in the art to complement that which is disclosed therein. In re Bode, 550 F. 2d 656, 193 USPQ 12 (CCPA 1977).

b. Abboud teaches the concept of an on-demand provisioning scheme (column 5, lines 16-19).

c. Abboud would inherently be unable to partition any disabled set of partitions.

d. Applicant asserts that Abboud does not teach the partitioning of a data library.

Examiner respectfully contends that a data library is constituted by a hard drive, repository, database, or any other system containing data files.

e. Abboud teaches the redefinition of sets of slot and data transfer elements (column 2, lines 38-47). Storage capacity rights are discussed in column 7, lines 21-36, along with column 3, lines 32-53.

f. Schubert's invention is embodied in a SAN, which constitutes a data library.

g. Schubert teaches the use of end users in the system (column 5, lines 40-50).

h. Abboud teaches the reservation of a set of elements in a library for present and future use by a customer (column 3, lines 1-22).

i. Abboud teaches the partitioning of the library into subsets, handling different components. Because each partition employs differing roles, the subsets are exclusive of one another (column 6, lines 20-36, 45-57).

j. Abboud teaches the redefinition of a data partition of a data library by moving elements between slot subsets, governed by changes in storage capacity needs (column 3, lines 32-46).

k. Schubert's masking of the logical storage devices constitutes a disallowance of access to the slot and data transfer elements. For the monitor of the system, the storage device is disabled (column 4, lines 42-57).

l. Darago teaches the use of serial numbers in a license, which therefore constitutes the keying of the numbers of the elements, as those numbers are naming conventions of the system. Since Darago teaches the use of an identification system in terms of the licenses used, the claimed element is taught in Abboud-Schubert-Darago (paragraph 17 of the Technical Background).

m. Examiner's original assertion of the disablement of resources may lead to increased space, as the resources use up a certain amount of space. Its disablement would lead to that space freed for employment in other ways. This concept is used in computer hard disk memory management, where certain programs are closed, if necessary. Therefore the intelligent management of space provides ample motivation for the combination of the references. Both inventions do address "precisely the same problem," as the optimization of storage, memory, and system efficiency thereof, is an aim shared by both inventions.

n. Combination of Darago's invention is motivated by the fact that there exists a need and expectation for a system to enforce the use of the network services so that the services cannot be abused. Darago teaches a license-based enforcement of network services, which alleviates this problem, while still achieving the same aim, which is the efficient use of network resources.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanim Hossain whose telephone number is 571/272-3881. The examiner can normally be reached on 8:30 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Martin-Wallace can be reached on 571/272-6159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tanim Hossain
Patent Examiner
Art Unit 2145


RUPAL DHARIA
SUPERVISORY PATENT EXAMINER